

**Canberra Space Centre**  
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## **HEALTH, SAFETY AND ENVIRONMENTASSESSMENT**

### **CANBERRA SPACE CENTRE**

CSIRO acknowledges that assessment and control of health, safety and environmental risk is an important process and one that is integral to achieving its strategic intent. Risk assessment of all CSIRO work and sites is intended as a planning activity to prevent incidents, injury, illness, property damage and environmental degradation as well as assist CSIRO comply with health, safety and environmental legislation.

CSIRO will identify workplace hazards that pose a risk to people and the environment, assess the magnitude of these risks and apply appropriate operational controls.

The Canberra Space Centre (located on the grounds of the Canberra Deep Space Communication Complex – CDSCC) is a public centre providing school groups with an education program in a safe and comfortable setting. The exhibits and school programs are assessed regularly for identification and assessment of hazards that may pose a threat to visiting school groups. Staffs trained in administration of first aid are on call at CDSCC at all times during school visits.

Identified hazards are examined against a hierarchy of controls to determine whether it is possible to eliminate the hazard completely or minimise the consequences.

Following is an assessment of identified health and safety hazards that visiting school groups may be exposed to during a booked visit to the Canberra Space Centre. The assessment includes identified controls to manage the risk and inherent and residual risk calculations. The inherent and residual risks are calculated using the Risk Assessment Module (see pages 2 and 3).

9<sup>th</sup> September 2011



## CSIRO HSE RISK MATRIX

CONSEQUENCE (Con) RATINGS	
Descriptor	Definition
<b>Catastrophic</b>	Single fatality Permanent or severe health effects for one or more staff members Major release of toxic pollutants resulting in long term damage to environment and / or significant compensation costs
<b>Major</b>	Extensive injuries or Serious health impacts Significant release of toxic pollutants Localised impact with significant clean up costs
<b>Moderate</b>	Medical treatment required and notification to regulator Transient release of pollutants Localised impact with no long term damage and minimal clean-up costs
<b>Minor</b>	First Aid injury or Health impact Brief transient release of pollutants that does require notification to regulator Relatively minor clean up costs
<b>Insignificant</b>	No injuries Brief transient release of pollutants – contained on site and does not require notification to regulators No immediate impact but requires some remedial action

LIKELIHOOD (Li) RATINGS	
Descriptor	Definition
<b>Almost certain</b>	Almost certain the event will happen several times. Chronic risk with history of occurrence
<b>Likely</b>	Likely to occur
<b>Possible</b>	Has occurred with the defined consequence
<b>Unlikely</b>	Low probability that the situation in the defined consequences will occur
<b>Rare</b>	Very unlikely that the situation in the defined consequences will occur

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	S	S	H	H	H
Likely	M	S	S	H	H
Possible	L	M	S	H	H
Unlikely	L	L	M	S	H
Rare	L	L	M	S	S

<b>H</b>	<b>High Risk</b>
<b>S</b>	<b>Significant Risk</b>
<b>M</b>	<b>Medium Risk</b>
<b>L</b>	<b>Low Risk</b>

## HSE Risk Assessment

Specific Hazard	Description of task/activity	Inherent Risk			Controls - existing and proposed	Residual Risk		
		C	L	IR		C	L	RR
Fall on uneven grass and dirt surfaces around public carpark	Adults and children running in carpark area and surrounds external to the Visitor Centre	Moderate	Possible	Significant	Supervision of adults and children when staff directly with them. Maintenance of external grounds removing potential trip/slip hazards.	Moderate	Unlikely	Medium
Collision with vehicle/bicycles	Collision with vehicle/bicycles in public carpark or pedestrian crossing	Major	Possible	High	Speed limits set in carpark, warning signs and marked and raised pedestrian crossing and no visual obstructions	Minor	Rare	Low
Trip and impact related to trees	Impact by falling branches or tripping over fallen branches in carpark area and surrounds external to the Visitor Centre	Moderate	Unlikely	Medium	Removal of fallen branches and maintenance of external trees removing dead or damaged branches.	Insignificant	Unlikely	Low
Cigarette smoke	People smoking in outdoor areas and eating areas	Minor	Possible	Medium	Signage indicating no smoking areas	Minor	Rare	Low
Snake bites and territorial nesting birds	Being bitten by poisonous snakes and attack by swooping nesting birds	Moderate	Unlikely	Medium	Signage indicating potential hazards with reptiles and birds. Monitoring of snakes during summer months and birds during nesting season. Supervision of adults and children when snakes are seen.	Minor	Unlikely	Low
Fall from low levels	Falls from low garden retaining walls, outdoor furniture and garden stairs	Minor	Unlikely	Low	Supervision of children when in the company of staff.	Minor	Rare	Low
Fall in children's playground	Fall from playground equipment	Moderate	Possible	Significant	Playground maintained to Australian Standard and regular independent audit/assessment of playground identifying and removing pinch points and hazards. Soft-fall material maintained and regularly replaced.	Minor	Rare	Low
Fall from antenna structure exhibit	Fall from climbing antenna (quadrapod) structure	Moderate	Possible	Significant	Signage indicating not to climb structure and barriers erected to prevent access to structure	Insignificant	Rare	Low
Automatic and gas return doors	Impact with door during opening or closing process	Minor	Rare	Low	Regular maintenance on door mechanisms to ensure correct operation and sensors set at correct levels/distances	Insignificant	Rare	Low
Impact with exhibits	Impact with exhibits (freestanding and wall-mounted), display cases, computer benches	Insignificant	Possible	Low	Children supervised by staff.	Insignificant	Rare	Low

Fall from external balcony	Climbing on or jumping over balcony outside Cafe	Moderate	Possible	Significant	Adult supervision of children. Removal of climbing footholds. Warning signs indicating 'do not climb'.	Minor	Unlikely	Low
Harm by/incident with member of public	Injuries from impact with, obstruction by or aggression from a member of the public	Minor	Rare	Low	Supervision by staff	Insignificant	Rare	Low
Electric shock	Electrical shock from powered equipment (eg: computers) and power outlets	Moderate	Unlikely	Medium	Electrical equipment maintained, power cords tested and checked. Power outlets fitted with approved childproof plugs.	Insignificant	Rare	Low
Allergic reaction to food/drinks	Allergic reaction to food and drinks served in Moon Rock Cafe.	Moderate	Possible	Significant	School groups required to notify staff of students at risk and to carry appropriate medications. Cafe staff maintains food preparation and storage areas to reduce risk of contamination.	Minor	Unlikely	Low